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Making Transparency in Coverage Data Accessible: AI-Assisted Extraction of Commercial Cataract Surgery Rates

Purpose: Insurers post negotiated rates in federal Transparency in Coverage (TiC) files, but these span terabytes across hundreds of files and are typically available only through costly commercial vendors or dedicated data engineering. This study tested whether an AI-generated computer program can extract cataract surgery rates directly from these files.

Methods: Cross-sectional study that used an AI-generated Python script to extract negotiated rates for standard (66984) and complex (66982) cataract surgery from Cigna's national TiC files in August 2026. The script located, downloaded, and parsed each in-network file, then extracted professional and facility rates for each code, excluding percentage and per-diem entries. Outcomes were the proportion of insurer networks successfully processed and the resulting rate distributions, summarized as median and interquartile range (IQR). Accuracy was assessed against published Cigna prices derived from a commercial vendor.

Results: Of 133 Cigna networks, 123 (92.5%) were successfully processed; the 10 excluded had non-standard file structures. Extraction yielded over 256,000 matched rate entries per code. Median professional rates were \$778 (IQR \$563–\$1,014) for 66984 and \$1,027 (IQR \$749–\$1,343) for 66982. Median facility rates were \$1,561 (IQR \$1,229–\$2,114) for 66984 and \$1,560 (IQR \$1,234–\$2,113) for 66982. These medians fell within 7% of independently published Cigna estimates for the same codes (professional 6-7% lower; facility within 3-4%).

Conclusion: An AI-generated script can accurately extract commercial cataract surgery rates directly from Cigna's TiC files, without needing a commercial vendor or specialized computing hardware. Ophthalmologists can use this approach to access previously hard-to-reach pricing data and conduct their own economic research.